Water Supply Acquisition Study

**Progress Report** 

Date: March 10, 2010

At the December 16, 2009 AWBA meeting, the staff reported on discussions from the November 23, 2009 AWBA workshop regarding the acquisition of additional water supplies for the AWBA to meet the interstate banking obligations to the Southern Nevada Water Authority. The staff continued its discussions with the Central Arizona Project (CAP) in January 2010. The CAP is interested in exploring the opportunities to acquire additional water supplies to meet the requirements of the 2005 CAGRD Plan of Operation and future water needs. AWBA and CAP staff recognized the shared interest in evaluating water supplies for potential acquisition. At the request of the AWBA, the CAP prepared a technical services agreement for the purposes of obtaining outside consulting services to better define the potential for acquisition of water supplies for the AWBA and the CAP. On January 18, 2010, the CAP entered into a contract with Thomas Carr to perform the study. The term of the study is through June 30, 2010.

The scope of the study includes several elements including:

- 1. Description of the potential water supplies
- 2. Preliminary screening of the water supplies
- 3. Conduct meetings with stakeholder groups to explain the objectives of the AWBA and CAP
- 4. Conduct preliminary interviews with individual parties to ascertain the level of interest and identify issues related to water supply acquisition
- 5. Further identify mechanisms for the acquisition of Colorado River water, estimates of availability, and methods for the acquisition, accounting and delivery of Colorado River water.

The consultant is conducting a study. The consultant is not representing the business interests of the AWBA and CAP nor is he negotiating agreements for water acquisition. After the completion of the study, the AWBA Commission and the CAP Board will determine the actions that each agency will pursue to acquire water.

The following categories of water supplies will be described. The list was prepared by the staff of the AWBA and CAP with input from the Commissioners.

Table 1 Summary of Potential Water Supplies									
Categories of Potential Water Supply	Acquisition Method	Comments							
Priority 1 Colorado Contracts	Purchase or lease: 1) land and water contract	Pre-1928 Contracts							
Priority 3 Colorado River Water Rights	entitlements, 2) water contract only.	Post 1928–Pre 1968 Contracts							
Priority 4 Colorado River Water Rights	Conditional forbearance agreements to create unused	Post 1968 Contracts							
Priority 5 Colorado River Rights	entitlements.	Unused Arizona Apportionment							

Table 1 Summary of Potential Water Supplies								
Mainstream Decreed Indian Tribal Rights CAP Tribal Contracts	Lease options to be determined  Leases and Forbearance agreements	Generally Priority 1, Legal restrictions						
Yuma Basin Groundwater	Exchange and Groundwater Transportation Permit	Requires desalinization						
Groundwater from Harquahala, Butler or McMullen Valley	Purchase or lease lands for Groundwater Transportation	Each Basin has different eligibility and transport requirements						
Excess Recharge Credits Effluent within AMAs	Purchase agreement Purchase agreement							
Poor Quality groundwater within AMAs	Obtain withdrawal Permit for poor quality groundwater	May require special water treatment including desalinization of brackish water						
Ocean Desalinization	Interstate/international agreements	High cost and long start up period						

The future water supply needs for each agency will be described to better determine the type of water supply and methods for acquisition of potential supplies. Each agency has projected that it needs to acquire a certain volume of water in a defined time period. The CAGRD 2005 Plan of Operation reports the following projected need. Short-term is 30 years.

General Schedule of CAGRD Water Supply Acquisitions										
Supply	Term	Annual	Estimated							
Description		Volume	Year that Usage Begins							
		(AF)								
CAP Supplies										
M&I Subcontract	Long-term	7,746	2005							
Indian Leases	Long-term	20,000	2012							
Indian Leases	Short-term	42,500	2021							
Effluent	Long-term	10,000	2008							
Effluent	Short-term	28,000	2008							
On-River Supplies	Long-term	15,000	2015							
On-River Supplies	Long-term	25,000	2022							
On-River Supplies	Short-term	30,000	2018							
Imported Groundwater	Long-term	35,000	2027							
Totals	Long-term	112,746								
	Short-term	100,500								

The AWBA needs to acquire 668,000 acre-feet of water to complete its water storage obligations for the SNWA. The time period for the acquisition is approximately ten years. Assuming that some water will be available from the excess CAP pool during the next ten years, it is estimated that 40,000 to 50,000 acre-feet are needed annually to meet the SNWA obligation. The following chart shows the AWBA and CAGRD acquisition requirements, including when the projected supplies are needed, the duration of the water supply need, and the quantity of the annual amount of water supply. The purpose of the chart is to separate the projected water needs into temporary and permanent needs. The chart will aid in the screening of potential water suppliess.

## Next Steps:

The consultant will continue to prepare background information to better understand the water supplies that may be available to the CAP and the AWBA and significant issues regarding acquisition and delivery. The staff will review and analyze the information. After the staff has refined its projected water supply needs, the consultant will be directed to initiate stakeholder meetings with interested parties to discuss the potential for developing partnerships for water supply acquisition. Reports on the study and the meetings with stakeholders and individual parties will be made at the June 16, 2010 AWBA meeting or at an AWBA workshop that would focus on this topic.

## Chart Showing Acquisition Timing, Estimated Magnitude and Term For the AWBA and CAGRD

Year Term	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2027	Extended Period	
Temporary (Short-term) Acquisition										1 CHOC						
AWBA																
10 YR	40 to 50 KAF Per Year															
CAGRD											47.VD0					
30 YR	28 KAF/YR + 17 N								+ 17 YRS							
CAGRD			20 KAEVR							+ 25 YRS						
30 YR									30 KAF/YR						T ZU TKO	
CAGRD									42.5 KAF/YR						+ 28 YRS	
30 YR									. 20							
Permanent Acquisition																
CAGRD 10 KAF/YR																
100 YR	YR															
CAGRD		20 KAF/YR														
100 YR CAGRD																
100 YR			15 KAF/YR													
CAGRD													· · · · · · · · · · · · · · · · · · ·			
100 YR													25 KAF/YR			
CAGRD														25	KAEMD	
100 YR														35	KAF/YR	
Total	78		98			113			143			145.5	170.5			
Annual Supply	KAF		KAF			KAF			KAF			KAF	KAF			